Enhanced divergent creativity and visual-spatial abilities in different types of Synaesthesia

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Research Question

Do different types of synaesthetes show higher involvement in art in line with enhanced figural and verbal divergent creativity and visual-spatial abilities?

Background

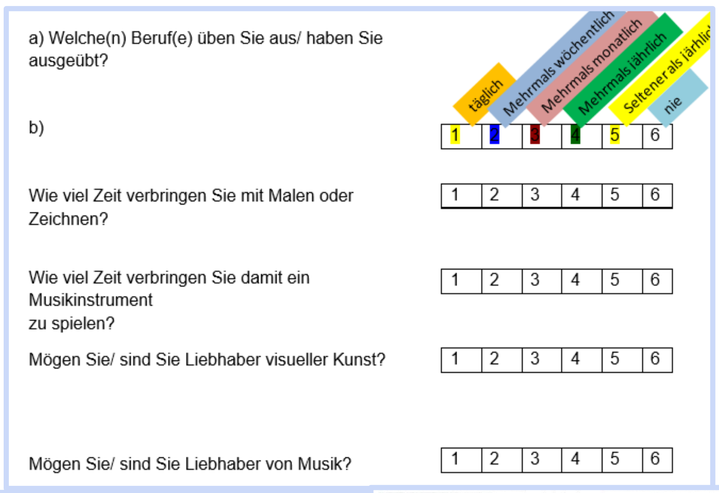
The aim of the present study was to test different types of synaesthesia regarding their involvement in art, their creative and visual-spatial abilities.

A higher prevalence for synaesthesia has been found in artists and a higher involvement in art has been found in synaesthetes (e.g. Rothen & Meier, 2010; Ward et al., 2008). So far it is unclear, whether synaesthetes do also show analogously enhanced basic figural and verbal divergent creative abilities or visual spatial abilities. Isolated enhanced involvement in art would support a view of facilitated artistic expression through synaesthetic experiences independent of basic creative and visual abilities.

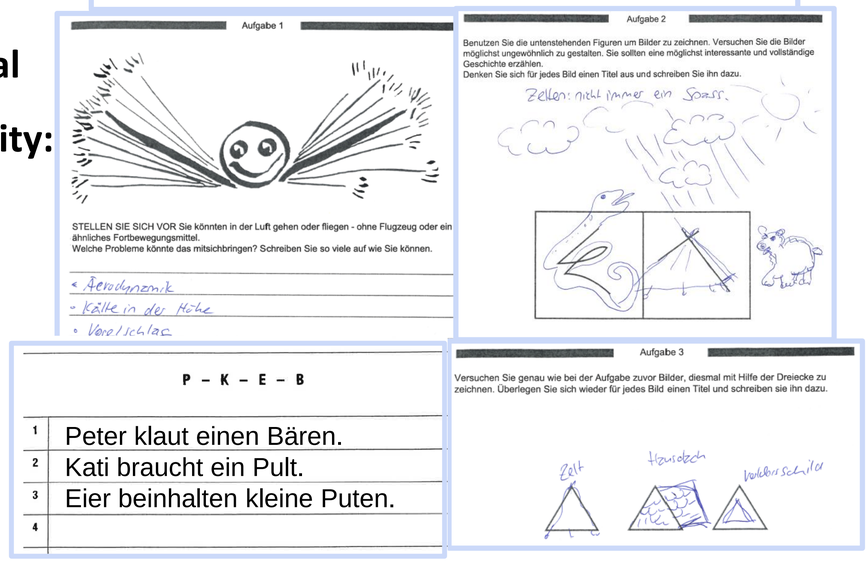
Method

20 grapheme-colour (GC), 18 sound-colour (SC), 20 grapheme-colour-and-sound-colour (GCSC) and 20 sequence-space (SS) synaesthetes.

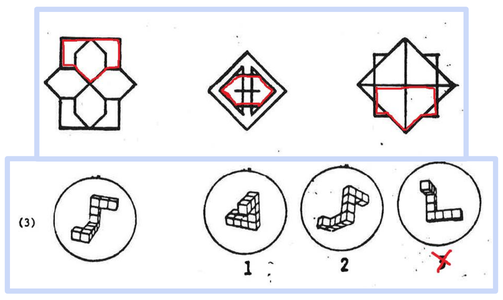
1. **Artistic involvement**:
   Active: playing music/ painting
   Passive: art/music consumption
   (Ward et al. 2008).



2. **Figural and verbal divergent creativity:**
   (Goff, 2002).



3. **visual-spatial abilities:**
   (Gottschaldt, 1929; Oltman, Raskin & Witkin, 1971; Metzler, 1971).

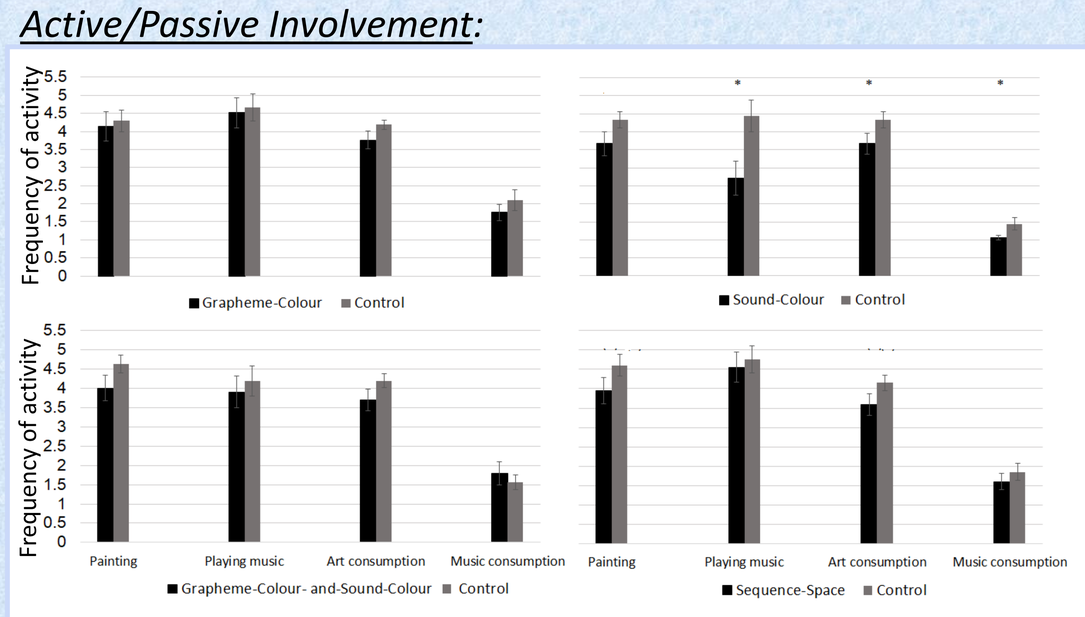


Results

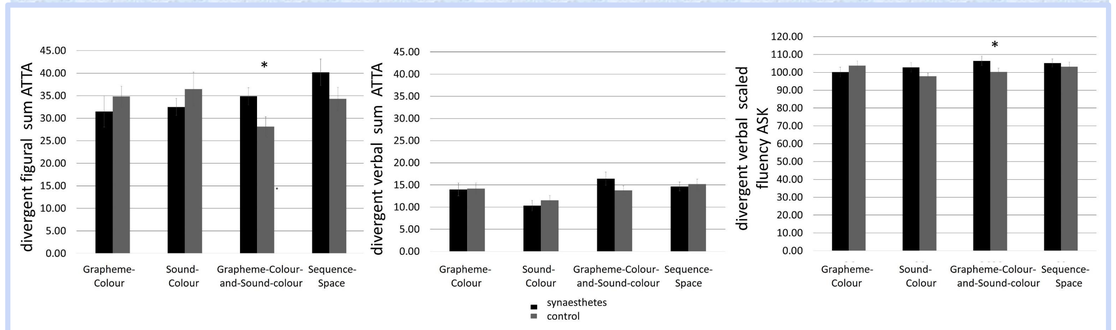
1. **Artistic involvement**:

Profession: 17 out of 78 (21.79%) creative professions amongst synaesthetes, 4 out of 76 (5.26%) amongst non-synaesthetes, $\chi^2(1) = 8.93$, $p = .002$.

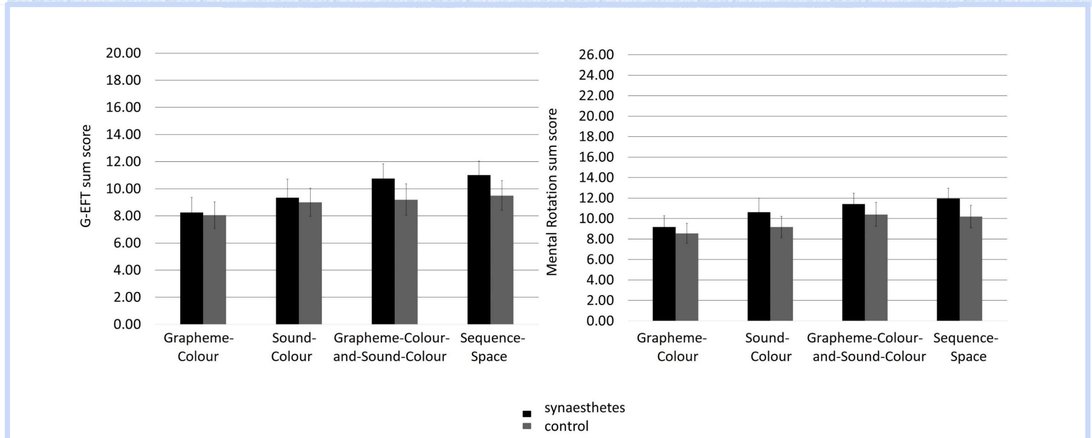
Active/Passive Involvement:



2. **Figural and verbal divergent creativity:**



3. **Visual-spatial abilities:**



Conclusion

- Artistic activity was not reflected in divergent creativity.
- Enhancement of creativity and artistic involvement through visual-spatial abilities appears to be limited.
- Different types of synaesthesia differ in divergent creative performance and involvement in art.